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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/698,644	10/27/2000	Gopalan Raman	10002988-1	6504

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HEWLETT-PACKARD COMPANY
Intellectual Property Administration
P.O.Box 272400
Fort Collins, CO 80527-2400

EXAMINER

WILLIAMS, KEVIN D

ART UNIT	PAPER NUMBER
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2854

DATE MAILED: 02/11/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Applicati n No.

09/698,644

Applicant(s)

RAMAN, GOPALAN

Examiner

Kevin D. Williams

Art Unit

2854

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 November 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3,5 and 10-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3,5 and 10-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 October 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Pri rity under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 10, 12, and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Daigneault (US 6,334,678) in view of Mehta (US 5,944,881).

Daigneault teaches a method identifying a source of an inkjet printed image, the method comprising printing an underlayer 4 on a frontside of print media using an inkjet printing device where the underlayer has a characteristic indicia of the inkjet printing device. Daigneault teaches the underlayer being a watermark. Watermarks are preprinted images that inherently receive a subsequent secure printed image that goes on top of the watermark when the media is printed by the end user. Daigneault teaches a storage device 28 for storing information specifying the underlayer, a control device 14 for selecting image information from the storage device to print the underlayer, and an input device.

Daigneault does not teach the source of the printed secure image being determined by examination of a back surface opposite the frontside to reveal a mirror image of the underlayer for identifying the characteristic indicia, the underlayer being printed using one of magenta and cyan ink.

Mehta teaches an underlayer being printed using one of magenta and cyan ink (col. 2, lines 8-10), where examination of a back surface (col. 2, lines 30-34) opposite the frontside reveals a mirror image of the underlayer for identifying the characteristic indicia.

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Daigneault to have the penetrating ink as taught by Mehta, in order to provide a hidden security feature which can be used to authenticate a document by viewing a backside of the document as taught by Mehta (col. 2, lines 30-34).

3. Claims 1-5, 11, 14-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Daigneault in view of Mehta and Silverbrook (US 6,431,704).

Daigneault teaches a method for printing a secure image on media using an inkjet printing device, the method comprising printing an underlayer 4 using an inkjet printing device where the underlayer defines an identification indicia. Daigneault teaches the underlayer being a watermark. Watermarks are preprinted images that inherently receive a subsequent secure printed image that goes on top of the watermark when the media is printed by the end user. Daigneault teaches that the underlayer can be printed from a group of various colors (col. 6, lines 51-53) that are independent of an ink color of the image to be printed by the end user. Daigneault teaches the identifying indicia being related to the secure image, a storage device 28 for storing information specifying the underlayer, a control device 14 for selecting image information from the storage device to print the underlayer, an input device, and an underlayer wherein

examination of a front surface allows viewing of the identification indicia for authenticating the secure image.

Daigneault does not teach the underlayer penetrating into a front surface of the media, the secure image completely covering the underlayer, the inkjet printing device for printing the underlayer being the same inkjet printing device for printing the overlayer, the underlayer being printed using one of magenta and cyan ink, the information from the input device being used for printing the overlayer, the underlayer being formed from a series of small ink drops that are sufficiently small to prevent viewing with the naked eye and under normal light, and examination of a back surface opposite the front surface allowing viewing of the identification indicia for authenticating the secure image.

Mehta teaches an underlayer penetrating (clm. 9) into a front surface of the media, the underlayer being printed using one of magenta and cyan ink (col. 2, lines 8-10), the underlayer being formed from a series of small ink drops that are sufficiently small to prevent viewing with the naked eye and under normal light (col. 4, lines 32-39), where examination of a back surface (col. 2, lines 30-34) opposite the front surface allows viewing of the identification indicia for authenticating the secure image.

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Daigneault to have the penetrating ink as taught by Mehta, in order to provide a hidden security feature which can be used to authenticate a document by exposure to ultraviolet light as taught by Mehta (col. 1, lines 63-65).

Silverbrook teaches that inkjet printing devices can be used to print images that appear in the foreground of media (Fig.1), and information from an input device 24 being selected for printing the images.

It would have been obvious to one of ordinary skill in the art at the time of the invention to additionally modify Daigneault to have the inkjet printing device of Daigneault be used to print the overlaying images, in order to save time and money by only using one device to print the underlayer and the overlayer.

With respect to claim 3, Daigneault teaches an underlayer in the form of background watermarks that are formed into designs such as company logos. Watermarks are preprinted background images that are subsequently printed on top of by the end user. It would be obvious to subsequently print an image that completely covers the underlayer, in order to efficiently utilize printing media resources by printing on the entire sheet of paper.

4. Claims 18-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Daigneault in view of Mehta and Liechti (US 5,038,153).

Daigneault teaches a method for printing a secure image on media using an inkjet printing device, the method comprising printing an underlayer 4 using an inkjet printing device where the underlayer defines an identification indicia. Daigneault teaches the underlayer being a watermark. Watermarks are preprinted images that inherently receive a subsequent secure printed image that goes on top of the watermark when the media is printed by the end user.

Daigneault does not teach the underlayer penetrating into a front surface of the media, where examination of a back surface opposite the front surface allows viewing of the identification indicia for authenticating the secure image, the secure image completely covering the underlayer, the shape of the identifying indicia of the underlayer being related to the shape of the secure image, the inkjet printing device for printing the underlayer being the same inkjet printing device for printing the overlayer, the inkjet printing device for printing the underlayer being different from the inkjet printing device for printing the overlayer, and.

Mehta teaches an underlayer penetrating (clm. 9) into a front surface of the media, where examination of a back surface (col. 2, lines 30-34) opposite the front surface allows viewing of the identification indicia for authenticating the secure image.

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Daigneault to have the penetrating ink as taught by Mehta, in order to provide a hidden security feature which can be used to authenticate a document by exposure to ultraviolet light as taught by Mehta (col. 1, lines 63-65).

Daigneault teaches an underlayer in the form of background watermarks that are formed into designs such as company logos. Watermarks are preprinted background images that are subsequently printed on top of by the end user. It would be obvious to subsequently print an image that completely covers the underlayer, in order to efficiently utilize printing media resources by printing on the entire sheet of paper.

Liechti teaches that inkjet printing devices can be used to print images that appear in the foreground of media (Fig.1). Liechti also teaches that it is conventional in

the art to print indicia, such as company logos, in the foreground of media using an inkjet printing device.

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Daigneault to print the company logo of Daigneault as a foreground image as taught by Liechti, in order to enhance the aesthetic quality of the media by providing matching background and foreground images.

It would have been obvious to one of ordinary skill in the art at the time of the invention to additionally modify Daigneault to have the inkjet printing device of Daigneault be used to print the overlaying images, in order to save time and money by only using one device to print the underlayer and the overlayer.

It would have been obvious to one of ordinary skill in the art at the time of the invention to additionally modify Daigneault to have the inkjet printing device of Liechti be used to print the overlaying images, since Liechti discloses that the device is capable of printing quality foreground images.

Response to Arguments

5. Applicant's arguments filed 11/17/2003 have been fully considered but they are not persuasive.

Applicant argues that none of the cited references teach that the same printing system may be used to print an underlayer defining an identification indicia and a secure image on top of the underlayer. Daigneault teaches an ink jet printing device for printing an underlayer. It is well known in the art that ink jet printing devices can also be used to print images appearing in the foreground of media. In fact, Silverbrook and

Liechti disclose ink jet printing devices that print images appearing in the foreground of media. The only feature that distinguishes Daigneault from Silverbrook and Liechti is the particular type of ink that Daigneault uses. Daigneault uses chemical translucentizing or opacifying agents in the ink which only the ink to embed into the surface of the media and appear as an underlying watermark. Therefore, it is not the particular ink jet printer which is unique in Daigneault, but rather the type of ink being used. Daigneault actually discloses that the ink jet printer used in the invention is a conventional ink jet printer. See column 2, lines 65-66. It is well known that various types of ink can be used in a particular ink jet printer. Daigneault even discloses this fact by stating that his ink can be used in a conventional ink jet printer. Silverbrook and Liechti provide evidence that conventional surface ink can be used in ink jet printers to print images appearing in the foreground of media. Therefore it would be obvious to substitute conventional ink for the ink disclosed by Daigneault after printing the underlayer in order to print the overlayer with the same ink jet device. One skilled in the art would be inclined to save time and money by only using one device to print the underlayer and the overlayer.

Applicant argues that none of the cited references disclose that the identifying indicia of the underlayer is in any way related to the secure image printed on top of the underlayer. In response to applicant's argument, the examiner wishes to note that the language "related to" is a broad recitation of the limitation applicant is referring to. In the above rejection, the examiner points out that watermarks are preprinted images that inherently receive a subsequent printed image that goes on top of the watermark when

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the media is printed by the end user. The underlayer and the overlayer, according to the above rejection, are related in several ways. For instance, the images are printed on the same media.

Applicant argues that none of the cited references teaches the underlayer having a characteristic indicia of the inkjet printing device. The examiner has given this language its broadest reasonable interpretation. When a user of the Daigneault device chooses to print a particular design on a media, the design itself is the characteristic indicia of the ink jet printer that printed the design.

Conclusion

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).


A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kevin D. Williams whose telephone number is (703) 305-3036. The examiner can normally be reached on Monday - Friday, 8:30am - 6:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew H. Hirshfeld can be reached on (703) 305-6619. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

KDW
February 7, 2004



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